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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,559	10/05/2000	Emily L. Hipp	A-69722/DCA/JWC	2072

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FLEHR HOHBACH TEST
ALBRITTON & HERBERT LLP
Suite 3400
Four Embarcadero Center
San Francisco, CA 94111

EXAMINER

CHANKONG, DOHM

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 02/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,559

Applicant(s)

HIPP ET AL.

Examiner

Dohm Chankong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5 are presented for examination.

Claim Objections

2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant, all future correspondence should include the recommended line numbering.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lack proper antecedent basis:
 - i. "said second process" - claim 1, line 14;
 - ii. "said second process" - claim 2, line 18;
- b. The claim language in the following claims is not clearly understood:

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i. as per claim 1, line 11, it is not clearly understood who knows the “known port” or how the “known port” is known;

as per claim 1, line 11, it is unclear “known port” is supposed to reference back to “a port on a host computer”;

as per claim 1, line 13, it is unclear if “said port” references “known port” on line 11 or “a port on a host computer”, on line 11.

ii. as per claim 4, line 15, it is not clearly understood who knows the “known port” or how the “known port” is known;

as per claim 4, line 15, it is unclear “known port” is supposed to reference back to “a port on a host computer”;

as per claim 4, line 16, it is unclear if “said port” references “known port” on line 15 or “a port on a host computer”, on line 15.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 3 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yu, U.S Patent No. 5,734,865.

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7. Yu was cited by applicant in IDS #2, filed 2/13/2001.

8. As to claim 3, Yu teaches a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, attempting to establish a connection with a second software application, residing on the other computer (Abstract), comprising the steps of:

- a. assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running (column 16, lines 20-29);
- b. said first application requesting to connect to a port and address of the second computer to which the second application is connected (column 4, lines 14-19 and column 5, lines 55-60);
- c. resolving the virtual IP address of the first application as a local address to connect the first application to said second application (column 15, lines 12-24.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrera, III, U.S Patent No. 6,247,057 in view of Chintakrindi et al, U.S Patent No. 6,216,159.

11. As to claim 1, Barrera, III teaches a computer network having a host computer and at least one other computer communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, and a second software application, residing on the other computer, attempting to establish a connection with said first application (Abstract), comprising, the steps of:

- a. assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running (column 3, lines 23-28) ;
- b. said first application requesting to connect to a port on a host computer using a known port (column 4, lines 58-59, column 6, lines 12-14);
- c. using the virtual IP address as a local address to connect the first application to said port (column 6, line 64 to column 7, line 14);
- d. resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address (column 3, lines 28-35);
- e. connecting said second application to said first application using said local address (column 4, lines 40-50);

However, Barrera, III does not teach a first application requesting to connect to a port on a host computer using a wildcard address.

12. Chintakrindi et al teaches using wildcard characters for internet protocol (IP) addressing so as to allow any value for certain areas in within the IP address (column 7, line 67 to column 8, line 1 and column 9, lines 20-21). It would have been obvious to one skilled in the art at the time the invention was made to implement Barrera, III's IP addressing with wildcard characters so that the addresses can be more broad to allow for a larger breadth of addressing when mapping the endpoints.

13. As to claim 2, Barrera, III teaches a step of resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address comprises the step of said second application supplying said virtual hostname to a module that maintains associations between virtual hostnames and virtual addresses, and returning the virtual address to said second application (column 5, lines 8-18).

14. Claim 4 is rejected under 35 U.S.C 103(a) as being unpatentable over Barrera, III, U.S Patent No. 6,247,057 in view of Aiken, Jr. et al, U.S Patent No. 6,430,622, in further view of Chintakrindi et al, U.S Patent No. 6,216,159.

15. Barrera, III teaches a computer network having a host computer and at least one other computer communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, and a second software application, residing on the other computer, attempting to establish a connection with said first application (Abstract), comprising, the steps of:

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- f. assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running (column 3, lines 23-28) ;
- g. said first application requesting to connect to a port on a host computer using a known port (column 4, lines 58-59, column 6, lines 12-14);
- h. using the virtual IP address as a local address to connect the first application to said port (column 6, line 64 to column 7, line 14);
- i. resolving a request from said second process to connect to said first application by resolving said virtual hostname to said local address (column 3, lines 28-35);
- j. connecting said second application to said first application using said local address (column 4, lines 40-50);

However, Barrera, III does not teach a computer program product executing the above steps or a first application requesting to connect to a port on a host computer using a wildcard address.

16. Aiken, Jr. et al teaches a computer program product to associate virtual IP addresses to application programs located on a computer (Abstract and column 7, lines 25-31). It would have been obvious to one skilled in the art at the time the invention was made to implement Barrera, III's method as a computer program product so that the method can be portable and run on a multitude of systems.

17. Chintakrindi et al teaches using wildcard characters for internet protocol (IP) addressing so as to allow any value for certain areas in within the IP address. It would have been obvious to one skilled in the art at the time the invention was made to implement Barrera, III's IP addressing with

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wildcard characters so that the addresses can be more broad to allow for a larger breadth of addressing when mapping the endpoints.

18. Claim 5 is rejected under 35 U.S.C 103(a) as being unpatentable over Yu, U.S Patent No. 5,734,865 in view of Aiken, Jr. et al, U.S Patent No. 6,430,622.

19. Yu teaches a computer network having a host computer and at least one other computer in communication with said host computer, a method of implementing a virtual network interface between a first software application having a virtual network identity, residing on said host computer, attempting to establish a connection with a second software application, residing on the other computer (Abstract), comprising the steps of:

- a. assigning a virtual IP address and virtual hostname that are unique to a first application while the first application is running (column 16, lines 20-29);
- b. said first application requesting to connect to a port and address of the second computer to which the second application is connected (column 4, lines 14-19 and column 5, lines 55-60);
- c. resolving the virtual IP address of the first application as a local address to connect the first application to said second application (column 15, lines 12-24.

However, Yu does not teach a computer program product executing the above steps.

20. Aiken, Jr. et al teaches a computer program product to associate virtual IP addresses to application programs located on a computer (Abstract and column 7, lines 25-31). It would have been obvious to one skilled in the art at the time the invention was made to implement Yu's

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method as a computer program product so that the method can be portable and run on a multitude of systems.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to virtual addressing:

U.S Patent No. 5,923,854 to Bell et al.

U.S Patent No. 5,951,650 to Bell et al.

The following patents are cited to further show the state of the art with respect to application migration:

U.S Patent No. 6,327,622 to Jindal et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is (703)305-8864. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

DC



**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**